

agggctgcaaa ttattgtcat gggaaagtaaa agtcattttac tgatgaacat ttcacccctcg 22440
catggaaaat ccaaacttcc ccttagaaat tcttaccctta tggagaaat aaagcactga 22500
tataaatctg accatcagga acagcaatag tggtaaaaca ttagatgcca ttagaaccaa 22560
aattgaccat aagaaccaga gttcagaaaa atgactaact gtcgtccctt attatgtatt 22620
tccactcaac attagcattt atgaaacatt ttgcacatta tcctgtccctc acccttgcaa 22680
tggtacattt atataatctg tgtaagtgc ccactgcccc acagagtcat aagtccctgg 22740
gacttggtga tggcacagt gactggcaca gagggtgagc tctgtcgtgc ttggaaagaa 22800
aatggtctt caaatgaatc ttgcctgtc ttgaaatgt taaaactgcct tttctagcaa 22860
aagcatagac actctttccc ttggtgacat gtgcgtacgaa tcagctggg tgaggatct 22920
gggctaaatg aaccaaacctt ccctatacat gaaggataca cagagatggt gacagagagt 22980
ggtcacttcc gtgagtggt tcaatcaag tcctctgaag ctaaattcaa tttttttct 23040
ttactaaaat gataaaagtt gttattggcg cttttgcctt tttatttcgt ataacttagg 23100
gctcagattt tcaatgtgtc aaatgcgtac tcacagcatg gttctctga cagtttattt 23160
catttaagga actcttcacc agtaagttt ttacttgcc ttgatatctc cacacattaa 23220
taataaaact aaccaaacctt aatctgaatt aaatctatc agctttaggc attatttgt 23280
gttctccccc ttcaacatg gtaactggc totctttctt aggagctga gaagatatga 23340
ctggggtttg ttttctcta cttcattttat tatctttctt tttccaatc aggttagtt 23400
ttccctttt agtaaaaggt gcatagtaac tgcttgtagt atttggtaa caagtgaata 23460
aatgaaatga attaaggtag tgtttcaact agcagccaa catttcttc tctcttagta 23520
gtgggtgggg ttcagttt ggaatggcac ctccctccag aggactgatc atgtcatttt 23580
cagttatgc ttccctttat gcagtaaagt ttccatattt ccataaagaa caagaaacca 23640
aataatccta atggatataat aatgaacaca cagatgaaaa ttccacctgc catgccttt 23700
aaaaaaagatc cctagctact tgtaattcat cttataatta aaatcagtct ttcacttat 23760
gttttcttca gatctcctgt tttgaagtgt atatagatat caacatagaa atgcagcgt 23820
tattgctatc aactgcagtg gagcagtgt tcgttaggtt tccacatcc ttgccttaag 23880
caaacctgca aaatcaaagt gtgagctacg tctaaacaat gggagaggct ttttttttt 23940
tttaagagt tagaactaag actctcaactt ctcctgtgc ctccacattt ttgaccttca 24000
cattggggccc ctgcatcaga atacagcacc ccctaacagg ctccgttca ggactcttc 24060
tctggaaata acagatgttg tctctagac tgcatagaaac cttatggaa tcattgtggg 24120
tcagaggccc tggatggtgc tggggacctc cctgacccac agcatctgac ccacatttc 24180
aggttcttag cgacttgcgt cagtaaagaa aaaggcacat agctaagtgg aagagcagat 24240
gaggcttgg ggaatcagc cagtggctg ccctagcaaa gttaaacaga actgctggg 24300
gctttggc ttaggctcac tactcaggga ggcactttaa catggatga ccagcaagtt 24360
tccttcctga tctttccac caccaccaca agcctagta ctcctccct tttgctctg 24420
ttgctctctt cggaaatgca ctggaaacca cttcagttc tggtaat tttcttattt 24480
cttattcaga aagaggaaga agctttgc ttactccaa ccgttctacc tattattcc 24540
ataaaacttc tggatctca tatcattttt ccaaattgtt atcttctgg gagccaggag 24600
actgcttca cattcaggg ccctggacat ataggactgc ctctaactca ctctaactca 24660
gcttattgac ttgaatgcac ctttttaaca agtactaaa aaacaaactg tgactattct 24720
ctgaaaatga gcctatatct catacttattt tattctgtt aacactgtga aacaaattaa 24780
gtcctctggc actatgtata taccataaaa agcttattt taagctact aattggacca 24840
gttttgacaa tattgaataa gcaactaattt cagatcataa tgtagaatta taggctgt 24900
aggaaaacaa tattcacacca tttgcttcc tcagtttcc tttcagaatg agtttcataa 24960
tgttcactaa tccaattttt aaaatccctt acaaagttt tcttaaacta tttccagaga 25020
ctatctggtt tgcattcta gaaatgaaat tgcctttca gcctaaacag atggccttaa 25080
tttttggtgg agtggatgt aaggaatgtc acatgagaaa ctgcaagcta ttagcttga 25140
atttttgtc attcatacat gtttcaaaat atatttaca ttttctctt tttaaatgag 25200
ttcccatctc tgacccctaa tgacttgcg aactaaaatt taaaagtga catcaatcac 25260
agcatttcca aaaatgtgaa ctcctagctt aaccgaagta ttcacttatt gggaaagctga 25320
tagagtaatt ccactaagtc caaaaagtgt cctctaaaag attccaaaga taagagtgtt 25380
ttcaactttg tcaagctgtc caaacacaaa tgcactccc tccctctgccc cacaggatc 25440
tttacccatcgt tacagcagcg taacttgagc agctgctgca aactgaggct ctctgaccc 25500
ttcgccactt tatttcagct gctaaaaatag ggctgaaatc tgcaggat cctgaaggga 25560
aggataagat tccctactatt caatttaatt taagctttt ttcagtgcc tgcgtgtgca 25620
caacactaag cttagaaagtc tgaggaatgt ttagattt aggtcctgtt cttgccttt 25680
catagatttta caatctattt atagggagag cttaaaagga gagaagagg aaggagcaaa 25740
cataaaaacg tccaaaattttt aaaataccat tttaaaattt tattttaaaa tttttttttt 25800

catgaaaaat taaggaaaac ctagattcat aaaaattcct ttcacaatct tttgtgtaaatc 25860
aattcagtgc ttgccttaa tgtctcatcc agtctgatga gacatgttt gtgatcaaca 25920
agggtttac tatgtttctt aattatgtgt cttgcctgtt atctcttct gaccgagatt 25980
attttaaca ataaattctg aaaactaaga aagtgaaagc ataaaatatt gtcttataaa 26040
atacgccaag gaaaaaatga cactccattt caaatatcaa aagtttagcat caagactgca 26100
caagatgaat gtacagtcat gtgttgcctt caaatgtgga catattctga gaaatgcac 26160
tttaggcaat tttgtcattt tgcaaacacc atagattgtt cttgcagcct aattgggtgga 26220
gcctactata cactaaggct atatggcata gocatgtact ccttaggctac aaacctgtac 26280
agcatgttac tgtactgaat agtggaggta cctgtacat aatggtaagt atttgtgtct 26340
ccaaacgttag aaaagctact gtaaaaatac agtattacaa ccttagggta tcaactgtctt 26400
atatgtggtc tttgttgcgatc cgaaatgact atgcttaata ccactgaact gtacacttaa 26460
aaatggtaa gatggtaaat tctatgttat gtatgtttt taataataaa aaaattgaaa 26520
aaagcatcaa catctttctt gggaaaaaaag aaaaagaaaag aaaatgcatt agagtgtatg 26580
gaatattga agtaatagat aaagtcaaaa acaaagaaaat gatcttgcct tgaactttc 26640
ttgtttaaga ttctgtacatc agtgtatcaca ctgttatttc ccaaacgacc cttcagctgg 26700
atacgacatt tcctgattgc agctgtgcattt attgcactt ataatgttct ggtcatccct 26760
gtgccaacta taaaatacat ctccggattt ctaggtgagt ttcaaaaaagg cttcaatttg 26820
gtcaacccaa actcagcctt cattaaatga tggacaggga accagtgcgt ggtcatccag 26880
atccccgttc ttctcaggc tcatggattt cctttatccc tgccaggctc tgggtattttga 26940
gctgctcaact gtccttcctt cctaactgac actggggagcc accttataagg tcaatttagt 27000
aagctgtttt ttctgtataga tgagggaaact gacccctata aaagtcaagt catataccctt 27060
ggtgtggacc caggatttgg acttaggtat tagctccacc atcaggaaaa gaggaagata 27120
gattttacct gccagaagct ctctgatact acgagttatca gctgaacatt gaaaggatc 27180
ttcagagggaa taggaggtt attatataaa gtttattttt agtatttccc cataactgca 27240
tggtcttattt attttcattt tactcattga gggtttactt aaactttaaa cacaatctaa 27300
aactttaaaaa gaaccatggg taggtcactt gcaaaagtaag aggtggatag ggtgtgtcat 27360
gagttcagcc accttagtat gtattttat tactaatccc ctgttaaattt gtgttaaattt 27420
cagccttttgc ttcttattt tatgttgcattt atacttatgc agctttgtat ttaggtacat 27480
ttaattgtc tctataaaaca tatcttctat gaataaataaa ccaagatgag cttatgtgac 27540
ttaagtgtgt gtttttagt ctaagtatag gatagcttta tattttgtttt atttaaagt 27600
tgcgtggca tctccttgc taggaactgc tggtaagac attgaccctt ccctgtgttt 27660
gtcttctcag gggcttcttc tgccactatg ctgatttttta ttcttccagc agttttttat 27720
cttaaaacttgc tcaagaaaaga aacttttagg tcaccccaaa aggtcggggt aagtaaacct 27780
tgcattttcc cccatttataa gttgttcttcaactacttta gaataaacta gaaaatacac 27840
atagttcaga aaaatgaatc aatgtacaag aacccaaaat caaaaatggg cttagaacttt 27900
ctggtagcag agaaaagggga catatttctg aaactcaaat gattctactt caaatatcaa 27960
atatcctgtt ttgagtctgt catabatgtc aaatagtagt agccttccc acagacacat 28020
atgcttcagg caaatagcag tgtccaaatc caagctgctg ttgtgtatc cgtggaaaat 28080
catgcaagaa ggaatttaggc tccctagcgg tggttatggaa taattttaaat atttgggtca 28140
tggttgttag gtttgcggaa ccaaaggaaa gatgttgcattt ttgtttccc ttccatagta 28200
cctgtgtcc ctgggtggaa ctaagatcca gaacagaacc attcatcgat ctgttaacct 28260
ctttagatac aaaatacagt cttattaaat tagagagtac atatttctt tccataagac 28320
tactatagaa acaaatgtca gaaataattt ttttccaaat aaggaaaatat tatcttccac 28380
tccttaataaa agtcatgttta aggcttggaa agaataatttca ttactgaatt actctgaatt 28440
tttacatttgc agtcatatttac ctttggatg ttctggggac ttcaaggataa tttggatc 28500
aaaggccac ccagcagctt gctccaaat tttaactcttca tgtagtccgt cttgcttgg 28560
ttttacagc agtgtgaccc tggcaaaattt cttgtcctgt ttgtgaccta ttttcgtt 28620
gaccaattgtt gaaatgagta caattatctt ctagacccat tctagtggaaa aatgttttagt 28680
tgctgttttcc ttatgttag gattaggagg tttaagtatg tgataaaaatg taaggccctt 28740
tctgggttta aatgtctgaa gtatttata tgtaggtatg tacatataatc ttatataatg 28800
tgtgtgtata ttatgttat gcacacacac acacacat atacactttt tttgtcaaca 28860
tctattaagc ttttggttt gtttgcatttta taaaatttgc atcatatcat atatgtctt 28920
cttttttaac ctgctctttt tcacccaaa gattgtaaagc attctctaga ttattgaatc 28980
tttttctgtc cttgtattttt taataatcac agggtattcc atcatcttgg tttactaaat 29040
caattaaacta ttactccatt gttgaacctg taggttgcattt ctctccactg tattcctctt 29100
ctttctcaaa cttaggattct aaattgactg ataggttagg cttggccatc tgagatattt 29160
agaataataat qqctcaatata atagatcaga ttgccatattt atgtaaaacaa cttaaaaacaa 29220

<210> 4
<211> 547
<212> PRT